

PJSD05TS-02

SINGLE LINE TVS DIODE FOR ESD PROTECTION PORTABLE ELECTRONICS

VOLTAGE 5 Volt **POWER** 200 Watt

SOD-523 Unit : inch(mm)

FEATURES

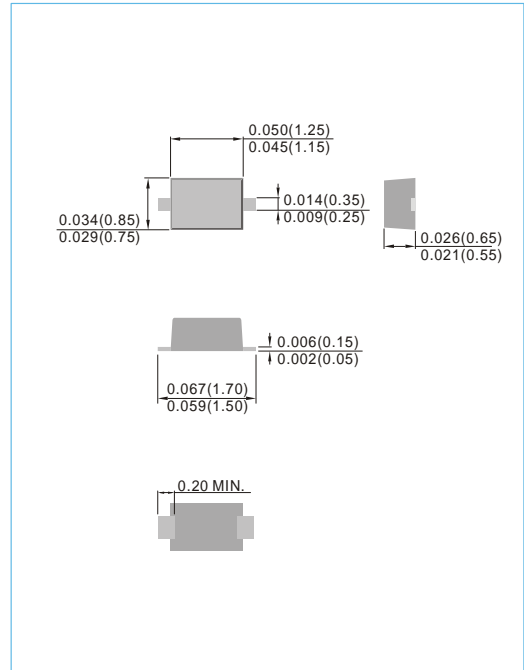
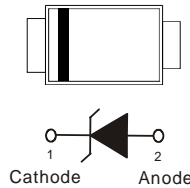
- 200 Watts peak pules power($t_p=8/20\mu s$)
- Small package for use in portable electronics
- IEC61000-4-2 8KV contact 15KV Air compliant
- Low clamping voltage and leakage current
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case: SOD-523 plastic
- Terminals : Solderable per MIL-STD-750, Method 2026
- Polarity : Color band cathode
- Marking : KS

APPLICATIONS

- Video I/O ports protection
- Set Top Boxes
- Portable Instrumentation



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

ABSOLUTE MAXIMUM RATING

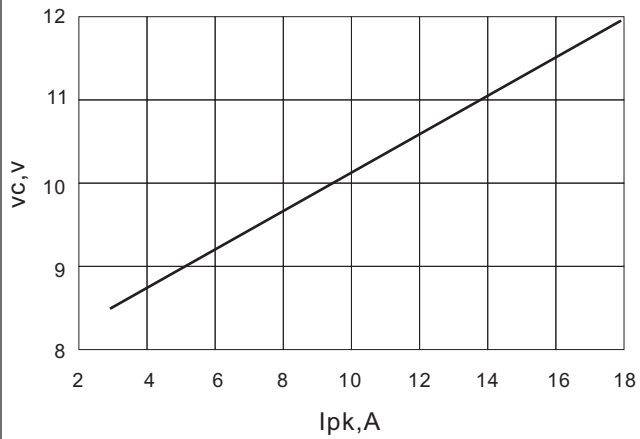
| Rating | Symbol | Value | Units |
|--------------------------------------------------|----------------|-------------|-------|
| Peak Pulse Power ($t_p=8/20 \mu s$) | P_{PP} | 200 | W |
| Maximum Peak Pulse Current | I_{PPM} | 18 | A |
| ESD Voltage per HBM MIL-STD-883 | V_{ESD} | 25 | KV |
| Operating Junction and Storage Temperature Range | T_J, T_{STG} | -50 to +150 | °C |

ELECTRICAL CHARACTERISTICS

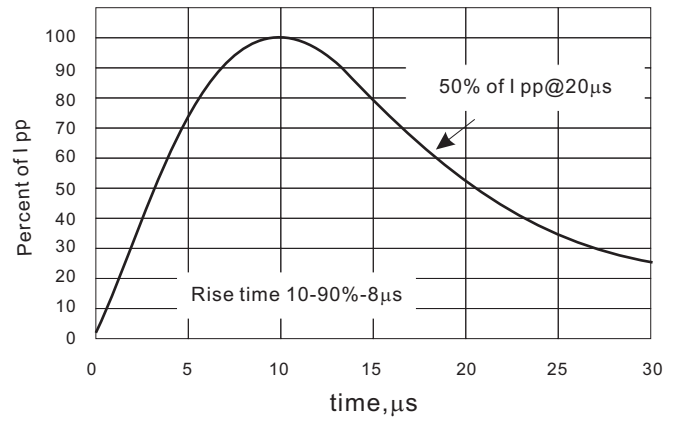
| Parameter | Symbol | Conditions | Min. | Typical | Max. | Units |
|---------------------------------|-----------|---------------------|------|---------|------|---------|
| Reverse Stand-Off Voltage | V_{RWM} | - | - | - | 5 | V |
| Reverse Breakdown Voltage | V_{BR} | $I_{BR}=1mA$ | 6.0 | - | - | V |
| Reverse Leakage Current | I_R | $V_R=5V$ | - | - | 1 | μA |
| Clamping Voltage(8/20 μs) | V_C | $I_{PP}=5A$ | - | - | 11 | V |
| Clamping Voltage(8/20 μs) | V_C | $I_{PP}=15A$ | - | - | 14 | V |
| Off State Junction Capacitance | C_J | 0Vdc Bias=f=1MHz | - | - | 160 | pF |
| Off State Junction Capacitance | C_J | 5Vdc Bias=f=1MHz | - | - | 80 | pF |

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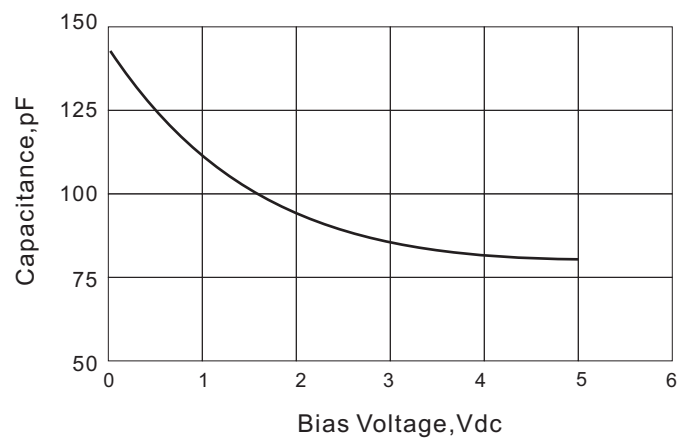
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Clamping Voltage vs I_{pp} 8/20µs Surge



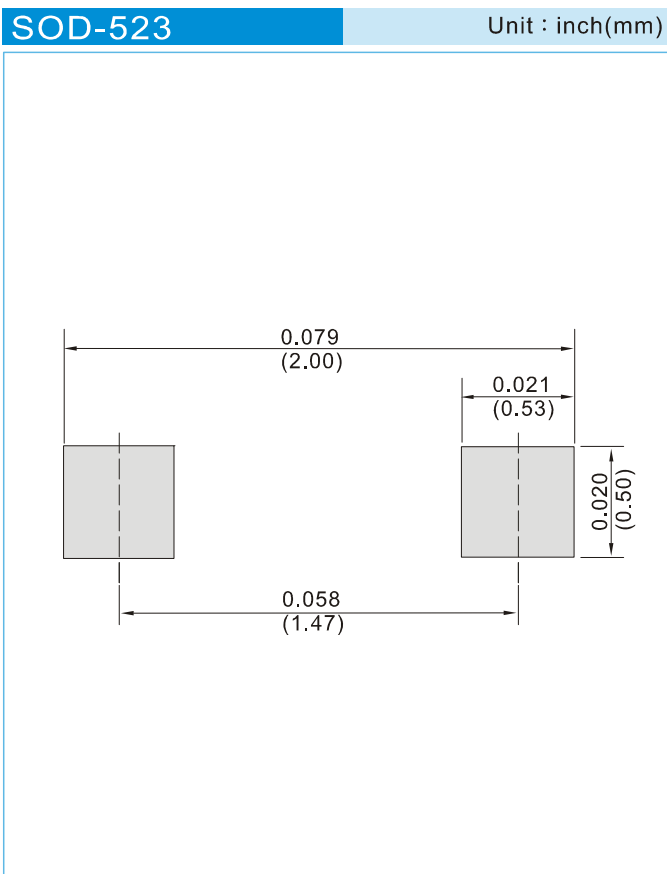
Pulse Waveform



Capacitance vs. Biasing Voltage@1MHz

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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
 - T/R - 12K per 13" plastic Reel
 - T/R - 5K per 7" plastic Reel

PJSD05TS-02

Part No_packing code_Version

PJSD05TS-02_R1_00001

PJSD05TS-02_R2_00001

For example :

RB500V-40_R2_00001

Part No.

Serial number

Version code means HF

Packing size code means 13"

Packing type means T/R

| Packing Code XX | | | | Version Code XXXXXX | | |
|--------------------------------------|----------------------|----------------------------------|----------------------|----------------------------|----------------------|---------------------------------------|
| Packing type | 1 st Code | Packing size code | 2 nd Code | HF or RoHS | 1 st Code | 2 nd ~5 th Code |
| Tape and Ammunition Box (T/B) | A | N/A | 0 | HF | 0 | serial number |
| Tape and Reel (T/R) | R | 7" | 1 | RoHS | 1 | serial number |
| Bulk Packing (B/P) | B | 13" | 2 | | | |
| Tube Packing (T/P) | T | 26mm | X | | | |
| Tape and Reel (Right Oriented) (TRR) | S | 52mm | Y | | | |
| Tape and Reel (Left Oriented) (TRL) | L | PANASERT T/B CATHODE UP (PBCU) | U | | | |
| FORMING | F | PANASERT T/B CATHODE DOWN (PBCD) | D | | | |



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